

TRANSMITTAL OF APPEAL BRIEF (Small Entity)

Docket No.
FNI-02204/03

In Re Application Of: Schwab et al



Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/886,685	06/21/2001	M. Haney	25006	2613	8645

Invention: INTEGRATED MULTI-FORMAT AUDIO/VIDEO PRODUCTION SYSTEM

COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:

- Applicant claims small entity status. See 37 CFR 1.27

The fee for filing this Appeal Brief is: \$250.00

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Signature

Dated: Dec. 6, 2005

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on

Dec. 6, 2005

(Date)

Signature of Person Mailing Correspondence

Sheryl L. Hammer

Typed or Printed Name of Person Mailing Correspondence

CC:



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of: Schwab et al

Serial No.: 09/886,685

Group No.: 2613

Filed: June 21, 2001

Examiner: M. Haney

For: INTEGRATED MULTI-FORMAT AUDIO/VIDEO PRODUCTION SYSTEM

APPELLANTS' BRIEF UNDER 37 CFR §1.192

Mail Stop Appeal Brief
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I. Real Party in Interest

The real parties in interest in this case are Barry H. Schwab and Kinya Washino, Applicants and Appellants.

II. Related Appeals and Interferences

There are no appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status of Claims

The present application was filed with 18 claims. Claim 14 was canceled by amendment in January 2005. Claims 1-13 and 15-18 are pending, rejected and under appeal. Claims 1, 15, 16 and 18 are the independent claims.

**IV. Status of Amendments Filed Subsequent
Final Rejection**

No after-final amendments have been filed.

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V. Summary of Claimed Subject Matter

Independent claim 1 is directed to an integrated multi-format audio/video production system. The system includes a high-speed serial input for receiving an audio/video program having an input format and an input frame rate. A serial-to-parallel converter in communication with the input is provided for outputting the program onto a data bus. A high-capacity read/write medium is interfaced to the data bus for storing at least a portion of the audio/video program. A format converter is interfaced to the data bus for outputting the audio/video program with an output format and output frame rate, either or both of which may be different from the input format and input frame rate. The input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof. (Specification, page 6, line 1 to page 9, line 7).

Independent claim 15 is directed to an integrated multi-format audio/video production system. The system comprises a high-speed serial input for receiving an audio/video program having an input format and an input frame rate. A serial-to-parallel converter in communication with the input is provided for outputting the program onto a data bus. A high-capacity read/write medium interfaced to the data bus for storing at least a portion of the audio/video program. A format converter is interfaced to the data bus for outputting the audio/video program over a high-speed serial network with an output format and output frame rate, either or both of which may be different from the input format and input frame rate. The input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof. (Specification, page 6, line 1 to page 9, line 7).

Independent claim 16 is directed to an integrated multi-format audio/video production system. The system comprises a high-speed serial input for receiving an audio/video program having an input format and an input frame rate. A serial-to-parallel converter in communication with the input is provided for outputting the program onto a data bus. A high-capacity read/write medium is interfaced to the data bus for storing at least a portion of the audio/video program. A format converter is interfaced to the data bus for outputting the audio/video program with an output format and output frame rate, either or both of which may be different from the input format and input frame rate, and wherein the input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof. A network interface in communication with the data bus provides a connection to local or remote users. (Specification, page 6, line 1 to page 9, line 7).

Independent claim 18 is directed to an integrated multi-format audio/video production system. The system comprises a high-speed serial input for receiving an audio/video program having an input format and an input frame rate. A serial-to-parallel converter in communication with the input is provided for outputting the program onto a data bus. A high-capacity read/write medium is interfaced to the data bus for storing at least a portion of the audio/video program. A format converter is interfaced to the data bus for outputting the audio/video program with an output format and output frame rate, either or both of which may be different from the input format and input frame rate, and wherein the input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof. A network interface in communication with the data bus enables one or more local or remote users to access the program. (Specification, page 6, line 1 to page 9, line 7).

VI. Grounds of Objection/Rejection To Be Reviewed On Appeal

The rejection of claims 1-13 and 15-18 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,356,945 to Shaw et al. in view of U.S. Patent No. 6,542,198 to Hung et al.

VII. Argument

A. Claims 1, 15, 16 and 18.

Claims 1, 15, 16 and 18 stand rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,356,945 to Shaw et al. in view of U.S. Patent No. 6,542,198 to Hung et al. All of these independent claims have been amended to include the limitation of an input or output frame rate of 24 frames-per-second or any integer multiple or fraction thereof. The Examiner concedes that “Shaw lacks the input or output frame rate being 24 frames-per-second or any integer multiple or fraction as claimed.” (Final Office Action, page 4). To address this deficiency, the Examiner cites a few lines of the Background of Hung et. al, which read as follows:

“The frames appear as a continuous motion video to the human eye when displayed at a minimum of 24 frames/second.” (‘198 patent, col. 1, lines 13-15)

“Therefore,” according to the Examiner, “it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Shaw and add the frame rate taught by Hung in order to obtain an apparatus that can correctly display motion video to a user.”

The Examiner's argument, which is flawed on several grounds, fails to establish *prima facie* obviousness.

First, one of skill in the art would not conclude that the addition of 24 frames per second would allow the apparatus of Shaw to "correctly display motion video to a user." Depending upon the application, frames greater than – or even less than – 24 fps would be 'correct' as long as a goal is achieved. That is, 8 frames per second might be suitable for security monitoring, whereas thousands of frames per second may be necessary for high-speed analysis. All Hung et al. is saying is that for some applications 24 fps is a minimum; indeed, even Hung et al. go on to explain that:

"Conventional video display devices such as televisions and computer monitors display individual frames at a "refresh rate". Typically the refresh rate is higher than 24 frames/second. For example, televisions display video at 30 frames/second." ('198 patent, col. 1, lines 16-20)

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In this case, there is no teaching or suggestion from the prior art to combine Shaw and Hung and, indeed, Shaw teaches away from the use of 24 fps. Nor is there a reasonable expectation of success, since Hung is merely repeating scientific theory regarding 'flicker,' which really has nothing to do with modifying the Shaw apparatus.

By way of a succinct review, Shaw resides in an architecture allowing a variety of multi-media devices (VCRs, PCs, TVs, Telephones, *etc.*) to communicate with a network. Provisions are included for processing signals utilizing various data rates (bandwidths), namely, 9.6 Kbps, 16 Kbps, 19.2 Kbps, 56 Kbps, 64 Kbps, 128 Kbps, 384 Kbps, and 1.544 Mbps. This, in turn, requires a comparable range of data compression ratios. The Shaw system also accepts signals in a variety of

formats: Graphics standards (RGB, VGA, *etc.*), Text/Data standards (FAX, ASCII), Audio Standards (CD Audio, Voice-grade audio, *etc.*), and Video standards (NTSC, PAL, SECAM, H.261, MPEG, *etc.*) “The capture processor 230 can decode various types of analog video input formats and convert them (*e.g.*, NTSC 464, PAL 466, SCAM [sic -- SECAM?] 468, or SVHS 469) to CCIR 601 470 YUV 471 4:2:2 472.” (See Col. 8, Lines 1-4.)

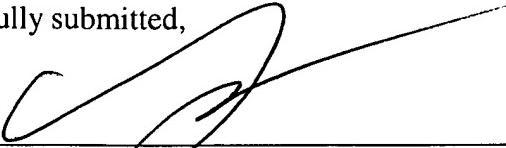
Referring to Col. 6, Lines 23-27 of Shaw, it is explained that “[h]ost processor 218 also has programmable frame updating rate capability 326. Frame updating rate 326 provides host processor 218 with 5 options. They can be either 30 frame per second (fps); 15 fps; 10 fps; 7.5 fps; or 1 fps.” A frame rate of 24 fps is not listed and, in fact, this frame rate is expressly excluded by the definitive listing of the 5 specific rates indicated. Furthermore, not only are there NO frame rates indicated that are integer multiples of ANY of the frame rates cited by the Examiner; but in addition, the *only* rates listed are simple fractions of one frame rate: 30 fps [1/2 @ 15 fps; 1/3 @ 10 fps; 1/4 @ 7.5 fps; 1/30 @ 1 fps]. This handful of fractions hardly merits the broad generalization to “... 24, 25, or 30 frames-per-second or any ... integer fraction thereof”.

In a broad sense, the Shaw device acts as an interface unit, essentially equivalent to the broadband digital cable interface that provides access for cable channels, high-speed data, and telephone service. All of the standards and formats described are compatible with the CCIR 601 [now “ITU-R BT.601-2”] Standard. Although this standard includes 25 fps and 30 fps, it does not include 24 fps. In addition, this is fundamentally an analog format, specifying either 525 or 625 vertical scan lines --- in effect, it is based on existing broadcast formats in the USA and Europe.

Conclusion

In conclusion, for the arguments of record and the reasons set forth above, all pending claims of the subject application continue to be in condition for allowance and Appellants seek the Board’s concurrence at this time.

Respectfully submitted,

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APPENDIX A**CLAIMS ON APPEAL**

1. An integrated multi-format audio/video production system, comprising:
 - a high-speed serial input for receiving an audio/video program having an input format and an input frame rate;
 - a serial-to-parallel converter in communication with the input for outputting the program onto a data bus;
 - a high-capacity read/write medium interfaced to the data bus for storing at least a portion of the audio/video program;
 - a format converter interfaced to the data bus for outputting the audio/video program with an output format and output frame rate, either or both of which may be different from the input format and input frame rate; and

wherein the input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof.
2. The multi-format production system of claim 1, wherein the high-speed serial input conforms to IEEE standard 1394 or derivatives thereof.
3. The multi-format production system of claim 1, wherein the program is input in an enhanced or high-definition format.
4. The multi-format production system of claim 1, wherein the program is output in an MPEG or Motion-JPEG format.
5. The multi-format production system of claim 1, wherein the program is output in a high-speed serial form.

6. The multi-format production system of claim 1, wherein the high-speed serial output conforms to IEEE standard 1394 or derivatives thereof.

7. The multi-format production system of claim 1, further including a network interface in communication with the data bus providing a connection to local or remote equipment.

8. The multi-format production system of claim 7, wherein the equipment facilitates streaming video over the Internet or other network.

9. The multi-format production system of claim 7, wherein the equipment provides archival storage of the audio/video program.

10. The multi-format production system of claim 7, wherein the equipment enables multiple users to access or manipulate the audio/video program.

11. The multi-format production system of claim 1, further including multiple format converters, each interfaced to the data bus.

12. The multi-format production system of claim 1, further including a digital effects unit for manipulation of the audio and/or video portions of the program.

13. The multi-format production system of claim 12, further including:
a high-speed network over which the digital effects unit is accessible; and
one or more workstations enabling users to access the digital effects unit and other aspects of the system.

15. An integrated multi-format audio/video production system, comprising:
a high-speed serial input for receiving an audio/video program having an input format and an input frame rate;

a serial-to-parallel converter in communication with the input for outputting the program onto a data bus;

a high-capacity read/write medium interfaced to the data bus for storing at least a portion of the audio/video program;

a format converter interfaced to the data bus for outputting the audio/video program over a high-speed serial network with an output format and output frame rate, either or both of which may be different from the input format and input frame rate; and

wherein the input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof.

16. An integrated multi-format audio/video production system, comprising:

a high-speed serial input for receiving an audio/video program having an input format and an input frame rate;

a serial-to-parallel converter in communication with the input for outputting the program onto a data bus;

a high-capacity read/write medium interfaced to the data bus for storing at least a portion of the audio/video program;

a format converter interfaced to the data bus for outputting the audio/video program with an output format and output frame rate, either or both of which may be different from the input format and input frame rate, and wherein the input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof; and

a network interface in communication with the data bus providing a connection to local or remote users.

17. The multi-format production system of claim 16, wherein the network interface facilitates streaming video over the Internet or other network.

18. An integrated multi-format audio/video production system, comprising:

a high-speed serial input for receiving an audio/video program having an input format and an input frame rate;

a serial-to-parallel converter in communication with the input for outputting the program onto a data bus;

a high-capacity read/write medium interfaced to the data bus for storing at least a portion of the audio/video program;

a format converter interfaced to the data bus for outputting the audio/video program with an output format and output frame rate, either or both of which may be different from the input format and input frame rate, and wherein the input or output frame rate is 24 frames-per-second or any integer multiple or fraction thereof; and

a network interface in communication with the data bus enabling one or more local or remote users to access the program.

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APPENDIX B

EVIDENCE

None.

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APPENDIX C
RELATED PROCEEDINGS

None.